March 29, 2011

Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

RE: In the Matter of LightSquared Subsidiary LLC Request for Modification of its Authority for an Ancillary Terrestrial Component; SAT-MOD-2010118-00239

Dear Secretary Dortch:

The American Farm Bureau Federation believes that high-speed broadband services have great potential to bring opportunity to rural Americans, but not at the expense of losing the global positioning service (GPS). Farm Bureau represents more than 6 million families, many of whom rely on GPS as an integral part of their farming business. Farmers use GPS to enhance their operations, for mapping field boundaries, roads, irrigation systems, precision planting, the application of chemicals and fertilizer and to address problem areas in crops such as weeds or disease. The accuracy of GPS is vital for farmers and ranchers in creating farm maps with precise acreage for field areas and road locations. GPS also allows farmers and ranchers to accurately navigate to specific locations in the field, year after year, for the collection of soil samples. GPS also allows farmers to work during low-visibility field conditions such as rain, dust, fog and darkness.

Farm Bureau is extremely concerned with the FCC granting LightSquared a waiver enabling it to operate high-powered cellular base stations in frequencies normally used by low-powered satellite-based systems, such as GPS systems. While the deployment of broadband services is important to the economic development and stability to rural America, the use of precision agriculture is also vital to America's farmers and ranchers as they continue to feed, fuel and clothe the world.

Precision agriculture allows farmers and ranchers to run efficient, economical and environmentally friendly operations. GPS allows farmers and ranchers to collect accurate geographical data of the farm or ranch, which they will then use to apply site-specific treatments to increase agricultural production and protect the environment. It is the accuracy of the GPS that allows the farmer or rancher the ability to limit input costs, for example the cost and application of fertilizer, and run an efficient operation. Any disruption to the GPS has the

potential to increase input costs of the operation and prevent the farmer or rancher from running an efficient, economical and environmentally friendly operation.

Farm Bureau urges reconsideration of the order granting LightSquared conditional authority to proceed with the construction of high-powered cellular base stations, which will interfere with the frequency used by the GPS. The FCC should consider the following after reconsideration:

- 1. Consider and give proper weight to incumbent spectrum user concerns that LightSquared's proposed use will create devastating interference to GPS receivers and licensed MSS-based augmentation signals.
- 2. Consider LightSquared's request to operate a nationwide network of powerful cellular base stations in the L-band under different technical and operational rules as a reallocation of spectrum that merits public comment and participation in a transparent rulemaking.
- 3. Establish an effective process to scientifically evaluate the interference impact of LightSquared's proposed operations on GPS services, as opposed to the present "working group" procedure. This "working group" procedure empowers LightSquared to set the agenda and direct the testing process, which fails to address many other requirements necessary to fairly and impartially evaluate proposed terrestrial operations in the L-band. This process should be open, impartial, deliberate and encourage public participation from the existing user community and other technical experts. The FCC should assume a more direct role in this process and contribute its institutional knowledge, engineering prowess and laboratory facilities. Adequate time should be allocated to this process, and public comment should be sought on test plans and results and at other critical junctures during the process of testing and evaluating new technology for the L-band.

Farm Bureau appreciates the work of the FCC to provide rural America with high-speed broadband services, but not at the expense of losing GPS.

Mark Maslyn
Executive Director

Public Policy